ABSTRACT

Modulated signal A is transmitted from a first antenna, and modulated signal B is transmitted from a second antenna. As modulated signal B, modulated symbols S2(i) and S2(i+1) obtained from different data are transmitted at time i and time i+1 respectively. In contrast, as modulated signal A, modulated symbols S1(i) and S1(i)' obtained by changing the signal point arrangement of the same data are transmitted at time i and time i+1 respectively. As a result the reception quality can be changed intentionally at time i and time i+1, and therefore using the demodulation result of modulated signal A of a time when the reception quality is good enables both modulated signals A and B to be demodulated with good error rate performances.